



quantity and quality

**questions of quantity, quality
and info-anxieties**

September 5, 2007



how much information?

print and beyond

"How much new information is created each year" Newly created information is stored in four *physical media*--print, film, magnetic and optical--and seen or heard in four *information flows through electronic channels*--telephone, radio and TV, and the Internet."



info inferiority

"The United States produces about 40% of the world's new stored information, including 33% of the world's new printed information, 30% of the world's new film titles, 40% of the world's information stored on optical media, and about 50% of the information stored on magnetic media."

-HMI



information in books

"If digitized with full formatting, the seventeen million books in the Library of Congress contain about 136 terabytes of information; five exabytes of information is equivalent in size to the information contained in 37,000 new libraries the size of the Library of Congress."

--How Much Information



better informed?



"On an average weekday, the *New York Times* contains more information than any contemporary of Shakespeare's would have acquired in a lifetime"



outline

**when did we start asking such
questions"**

about what?

technology and quantification

recurring anxieties

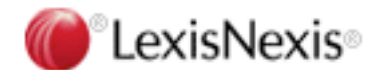


what kind of question?

"how much information?"



Results 1 - 10 of about 940,000 for "how [much information](#)".



162



"how much information?"



0

[118,000 books, 1473-1700]



4

[150,000 books, 1700-1800]

1788, 1789, 1795, 1796



ask again

Books All books - [Limited preview](#) - [Full view](#)

Books 1 - 6 of 6 on "how much information" date:1450-1800.



[Letters to a student in the University of Cambridge, Massachusetts - Page 109](#)

by John Clarke - 1796

How much ingenuity might be dif- played, and how much information communicated by a ...

[Full view](#) - [Table of Contents](#) - [About this book](#)



[The British Critic, and Quarterly Theological Review - Page 259](#)

by John Henry Newman, James Shergold Boone - 1796

... 1796 ... how much information he derived from this excellent writer ...

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[the British Critic, A New review for Jlyu, August, September, October, November, and December, MDCCXCVI ... - Page 553](#)

by F and C. Rivington - 1796

The public would then have known how much information they owed to an ...

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[The Monthly Magazine](#)

by Benjamin Franklin Collection (Library of Congress), Richard Phillips - 1796

Page 107

No preview available

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[United States Reports: Cases Adjudged in the Supreme Court - Page 257](#)

by United States Supreme Court - 1798

First, the staff refuses to diagnose him, no matter how much information they may have, unless he talks. The result is that he. never receives a hearing and ...

Snippet view - [About this book](#)

[[More editions](#)]

[Reports](#)

by Northern Ireland Parliament. House of Commons, Great Britain Parliament. House of Commons - 1800

Page 121

No preview available



"how much information?"

"How many mental pleasures, and how much information should we be deprived of if there was no night?" Sturm, *Reflections*,
Edinburgh, 1788.

"... how much information he derived from this excellent writer;" Jones, *Memoirs of ... George Horne*. London, 1795

"How much ingenuity might be displayed and how much information communicated by a professor." Clarke, *Letters to a Student*,
Boston, 1796



"how much information?"

"How much information, how much consolation, and how much fortitude do you afford me at the close of my life." Voltaire to Frederick of Prussia, London, 1789



"how much information?"

"How much information, how much consolation, and how much fortitude do you afford me at the close of my life." Voltaire to Frederick of Prussia, London, 1789

DE M. DE VOLTAIRE

A Ferney, 6 janvier 1778.

Sire, grand homme, que vous m'instruisez, que vous me consolez, que vous me fortifiez dans toutes mes idées au bout de ma carrière! Votre Majesté, ou plutôt votre humanité a bien raison; le fatras métaphysique, théologique, fanatique, est sans doute ce que nous avons de plus méprisable, et cependant on écrira sur ces chi-



in the press

How much information?

Times (London)

1784 -1900: **12**

how much information can be contained in so
handy and compact a volume (1892)

New York Times

1851-1900: **12**

4 concerning books



quantity of information



0



27/12



Pinto, 1774: The best book is not that, perhaps,
which contains the greatest quantity of
information

House of Lords, 1788: You have said Mr. Hastings
could not have obtained full and compleat
Information upon the subject?

James, 1790-98: Whatever difference may be found
between the parts of this work of mine already
published .. as to the quantity of
information ...

Knox, 1790:[Salamasius's works] furnish a great
variety and quantity of information



Bond, 1795: By presenting [the reader]
with a quantity of information

Longworth, *Almanac*, 1799 The register will
be found to contain double the quantity of
information ever before inserted in it.

Historical Magazine, 1799

Johnson's *Journey to the Western
Islands* .. does not admit of abridgement,
because every sentence compresses such a
quantity of information.



in the press

"quantity of information"

Times (London)

1784 -1900: **43**

7 ads (dictionaries, grammars, atlases);

25 books (reviews), newspapers, reports;

7 education;

1 telegraph;

1 trade statistics,



in the press

THE TIMES RECIPES. Information for the Household. Reprinted by Authorization and Carefully Revised and Indexed from THE NEW-YORK TIMES. New-York: THE AMERICAN NEWS COMPANY. 1876.

The great popularity of the "Household" column of the Sunday edition of THE TIMES,



found useful in all. The recipes have come from all directions, some from the inmost recesses of our large cities, some from remote spots in the country, whence they could never have been hunted out for the benefit of the public at large, except through the medium of THE TIMES. It proves, in fact, how much useful information lies hidden away in isolated places, but ready to be spread abroad directly the opportunity for utilizing it arises. And while the Household Column of our paper testifies further to the same fact by its continuous wealth of useful hints upon a wide variety of topics, we are assured that this reissue must prove a very acceptable aid to families, in many of which it will be not less appreciated in because offered to them at a moderate price.



NEW PUBLICATIONS.

READY THIS DAY.

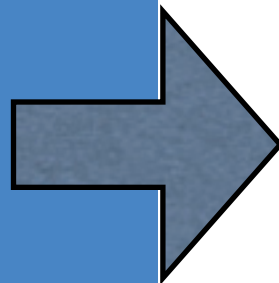
GREELEY'S TRAVELS IN EUROPE.—GLANCE AT EUROPE: In a series of Letters from GREAT BRITAIN, FRANCE, ITALY, &c. By HORACE GREELEY. Octavo, cloth; price, one dollar. This volume comprises the observations made during Mr. Greeley's recent European tour, on Society, Manners and Customs, Art, Literature, Agriculture, Foreign Politics, and a great variety of other attractive and exciting topics.

It has copious notices of the Great Exhibition or World's Fair in London; complete descriptions of the Cultivation of the Soil in different countries; brilliant Criticisms of the Works of Art in the great European Capitals; and graphic sketches of Public and Domestic Life in London, Paris, Rome, &c., written in the frank, straightforward, piquant style for which Mr. Greeley is widely celebrated.

A more authentic, instructive, and amusing Book of Travels has probably never been issued from the American press. The vast amount of information which it contains is presented in such a lively and off-hand manner that the perusal of the volume becomes as interesting as a novel.

Whoever would obtain a fresh, Daguerreotype view of the present state of England, should not fail to make himself acquainted with its contents. Even the discussion of the driest topics, which it sometimes takes up, is enlivened with such frequent flashes of humor, and pervaded with such genial and sparkling vivacity, that no one who commences the volume can lay it down without finishing its perusal.

We confidently anticipate a very extensive circulation for this work throughout the United States. The name of

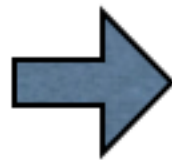




Times (1851)

NOTICES OF NEW PUBLICATIONS.

The Overland Expedition in Search of Sir JOHN FRANKLIN is, perhaps, as deeply interesting as any marine effort. Sir JOHN RICHARDSON set out from Quebec early in the Summer of 1848, and traversing all that wild region stretching between the Lakes and the Arctic Sea, explored the shores of these gelid waters in pursuit of the long lost voyager. While he was unsuccessful in his main object, yet the journey was exceedingly profitable in other ways; and those who read Sir JOHN'S "ARCTIC SEARCHING EXPEDITION," as issued by the HARRIS, will be grateful for the immense amount of information respecting the nations, languages, climate and other peculiarities of those elevated latitudes. The appendix might serve separately for a geography of the British Possessions, so complete and methodical are the matter and arrangement.





Times (1852)

poses. So in other circles. FITZ-ROY CUNNINGHAM, Esquire, a shrewd and clear-headed merchant, who has acquired princely wealth without education, has made himself generally intelligent, and has acquired an immense amount of information regarding nearly everything in the world, has little respect for science or learning; unless, indeed, he may stand at the head of the Board of Trustees and contrive with his brethren to get out of the Faculty the maximum of work at the minimum of salary. [Laughter.] As a general



brahmin worries

"Intellectual culture consists, not chiefly, as many are apt to think, in accumulating information, though that is important, but in building up a force of thought which may be turned at will on any subjects, on which we are called to pass judgment."

--William Channing, 1838

"It may well be questioned whether the invention of printing, while it democratized information, has not so levelled the ancient aristocracy of thought"

--James Lowell, 1893




and quality?

"quality of information"

Google™

1,666,000 [vs. 618,000 quantity]

 LexisNexis®

348 in 6 months [vs 52]



still "quality"



0



1

Charles Taylor, *Surveys of nature* ... 1787
while they are instances of the general desire
of knowledge, are also proofs of the necessity
that it should be directed by sagacity and
virtue; it is not the quantity but the quality
of information which renders it valuable.



still "quality"

Times (London), 1784-1900: 0

New York Times 1851-1900: 0

Google Books, 1800-1850: 13/9

Dublin U Magazine, 1839: that the quality of information concerning Germany is a thing much more to be desired than the quantity [review]

Perils of the Nation 1844: the degree and quality of information acquired

by those in schools

Qofl September 4, 07- 24



Google Books Qofl

1850 [publisher's puff for "diseases of winter"]

Manual of Analytical Chemistry. 1831. [review]:
unequaled both for quantity and quality of
information

Churchman's Review. 1843 [on education]: Let us look
a little more narrowly ... the extent and quality of
information

Medical Review. 1842: quality of information
communicated to the student should be improved

Minutes of the Committee [education], 1850: with
reference to the extent and the quality of
information 25.



the urge to count

Alvin Toffler

"The Quantity of Culture,"

Fortune, 1960

"The United States suffers from an
inferiority complex about its
culture consumption ...

I shall attempt to give a rough idea
of the amount of culture
consumption in this country."

-- *The Culture Consumers*, 1961

Qofl September 4, 07- 26



fear of technology

"It will soon be the employment of a lifetime merely to learn [books'] names. Many a man of passable information at the present day reads scarcely anything but reviews, and before long, a man of erudition will be little better than a mere walking catalogue."

old fears

"Even for studies, where expenditure is most honorable, [developing libraries] is justifiable only so long as it is kept within bounds. What is the use of having countless books, and libraries whose mere titles their owners can scarcely read through in a whole life time? The mass of them does not instruct but rather burdens the student; and it is much better to surrender yourself to a few authors than to wander through many. Forty thousand books were burned at Alexandria; let someone else praise this library ... as did Titus Livius, who says that it was the most distinguished achievement of the good taste and solicitude of kings. There was no "good taste" or "solicitude" about it, but only learned luxury--no, not even learned, since they had collected the books, not for the sake of learning, but to make a show, just as many who lack even a child's knowledge of letters use books, not as the tools of learning, but as decoration for the dining room."



to begin at the beginning

Thamus replied: O most ingenious Theuth, the parent or inventor of an art is not always the best judge of the utility or inutility of his own inventions ... this discovery of yours will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves. The specific which you have discovered is an aid not to memory, but to reminiscence, and you give your disciples not truth, but only the semblance of truth; they will be hearers of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality."

Qofl September 4, 07- 29



quality not quantity

[Defense News Media Group Conferences ISR Integration 2003](#)

Quality, not Quantity, of Information Is Current Focus of DCGS Effort By GAIL KAUFMAN. Scott Mahaskey, Defense News Media Group Col. ...
[defensenews.com/promos/conferences/isr1103/2405325.html](#) - 13k -
[Cached](#) - [Similar pages](#)

[\[PDF\] HNR Response to The Environment, Food and Rural Affairs Committee ...](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)
Consumers need enhanced **quality not quantity of information** on nutrition. issues. Public policy about food and diet must be built on evidence-based ...
[www.mrc-hnr.cam.ac.uk/comms/consultations/EFRA_Inquiry_food_inform.pdf](#) -
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[Digital Web Magazine - Fast Cars, Fast Food, Fast Access](#)

Quality, not quantity of information, is now and will always be, the key to keeping a consumer coming back to your web site. Interactive motion graphics may ...
[www.digital-web.com/articles/fast_cars_fast_food_fast_access/](#) - 18k -
[Cached](#) - [Similar pages](#)

[Knowledge Discovery for Business Information Systems - Google Books Result](#)

by Witold Abramowicz, Jozef Zurada - 2000 - Computers - 456 pages
These changes should affect **quality not quantity of information** retrieved by the system. That is why profiles should be improved only by incoming documents ...
[books.google.com/books?isbn=0792372433...](#)

[Survey Finds Savings Burnout Among Boomers](#)

Investors need **quality, not quantity, of information.**" Most investors would like help with their retirement portfolios but aren't sure where to turn. ...
[www.consumeraffairs.com/news04/2006/11/savings_burnout.html](#) - 33k -
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quality not quantity



[Knowledge Discovery for Business Information Systems - Page 15](#)

by Witold Abramowicz, Jozef Zurada - Computers - 2000 - 456 pages

These changes should affect **quality not quantity of information** retrieved by the system. That is why profiles should be improved only by incoming documents ...

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[Management of Information Systems Technology - Page 139](#)

by Janice Burn, Eveline Caldwell - 1990 - 272 pages

The emphasis is on **quality, not quantity, of information**. In planning for the adoption of IT it is imperative to avoid computerizing any badly designed ...

Snippet view - [About this book](#)

[The Public Relations Journal - Page 21](#)

by American Council on Public Relations, Public Relations Society of America - 1968

C Quality, not quantity, of information. C Professional looking publications, B

Sources of additional information. Assuming that these five points are of ...

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[Coach & Athlete](#)

by Georgia Athletic Coaches Association

The enthusiastic but novice coach often learns the hard way that it is **quality not quantity of information** which assists his players the most. ...

Snippet view - [About this book](#)

[[More editions](#)]



[Tuning Microsoft Server Clusters: Guaranteeing High Availability for](#)

by Robert W. Buchanan - Technology - 2003 - 368 pages

Focus on **quality, not quantity of information**. A good analogy is the software



who's counting?

"The amount of information is defined,
in the simplest cases, to be measured
by the logarithm of the number of
available choices."

Warren Weaver, *The Mathematical Theory
of Communication*, 1949.



information

"The word *information*, in this theory,
is used in a very special sense that
must not be confused with its ordinary
usage."

--Weaver, 1949